

## ABSTRACT

[035] A method for obtaining an optimal reflectivity value for complex multilayer stacks is disclosed. Aspects of the present invention include generating a model of a multilayer stack and parameterizing each layer by a thickness and an index of refraction; allowing a user to input values for the parameters; calculating an extrema for a cost function of reflectivity  $R$  using the input parameter values; calculating sensitivity values  $S$  for the extrema points; and obtaining an optimal value by calculating a cost function  $R + S$ .